

REMARKS

Summary

Claims 1 and 3-11 were pending, and all of the claims were rejected in the Office Action. The Applicant has carefully considered the reference and reasons advanced by the Examiner and respectfully traverses the rejections, as the Examiner has not made out a *prima facie* case of obviousness.

Claim Rejections

35 U.S.C. §103(a)

Claims 1 and 3-11 were rejected under 35 U.S.C. §103(a) as being unpatentable over Fuse et al. (US 4,642,693; "Fuse"), in view of Yamagishi (US 4,642,694; "Yamagishi").

Claim 1 recites, *inter alia*, a plurality of converters that convert a luminance signal and two color-difference signals of an input video signal into digital signals, each digital signal corresponding to one of the luminance and color-difference signals, and a plurality of setting circuits that set magnitudes of reference voltage ranges to be identical in each of the converters.

The Examiner accepts that Fuse does not teach "how a plurality of setting circuits that sets magnitudes of reference voltage ranges to determine upper and lower limit voltages of the digital signals would be identical in each of the converters" (Office Action, page 3, lines 2-5 from the bottom of the page), and depends on Yamagishi to remedy this defect in the *prima facie* case. The Examiner cites Yamagishi as teaching "how such a concept would be accomplished manually [emphasis in original] by teaching a plurality of level shifters (setting circuits)." Specifically, the manual adjustment of VH' and VL' in the AD converters 441a-41c is by the level shifters 47a-47c of Fig. 12 thereof.

This combination of Fuse and Yamagishi fails to teach all of the elements and limitations of Claim 1. The use of a manually adjustable voltage separately on each one of the level shifters requires the adjustment of a separate control voltage for each one of the three level shifters independently producing the voltages supplied to a

corresponding A/D converter, whereas the arrangement of Claim 1 supplies an identical reference voltage to each of the A/D converters. Thus, in the case of the arrangement of Claim 1, the same voltage is supplied to all of the A/D converters, whereas in Yamagishi the reference supplies a separate voltage to each of the A/D converters.

In order to make the voltages supplied to each of the A/D converters the same, the Examiner relies on a manual adjustment of each of the voltages 6a1-6c1, without in any way suggesting how an operator would ensure that voltages were identical and remained identical during the adjustment. To set three voltages identically by manual means there must be some means of measuring the individual voltages.

Further, *In re Bernhart*, 417 F2d. 1395, 1399, 163 USPQ 611, 615 (CCPA 1969) the court stated:

We know of no authority for holding that a human being, such as a draftsman, could ever be the equivalent of a machine disclosed in a patent application, and we are not prepared to so hold in this case.

That is, a human action such as applying a force, or turning a knob to adjust the voltage, cannot be substituted for an element or limitation of an apparatus which performs that function. Hence, for Claim 1 to be obvious, the apparatus itself in Yamagishi would have to perform the actions required without human intervention.

For at least these reasons, the Applicant respectfully submits that the Examiner has not made out a *prima facie* case of anticipation, and that Claim 1 is allowable.

Claims 3-5 and 10 are dependent on Claim 1 and are allowable, without more.

Claim 6 contains the same recitation as Claim 1 and is allowable for the same reasons. Claims 7-9 and 11 are dependent on Claim 6 and are allowable, without more.

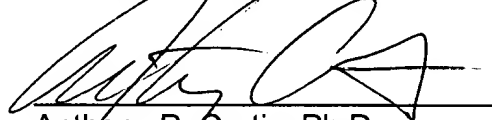
Conclusion

Claims 1 and 3-11 are pending. The Applicant respectfully submits that the pending claims are allowable and requests that a Notice of Allowance issue.

Serial No.: 09/378,519

The Examiner is respectfully requested to contact the undersigned in the event that a telephone interview would expedite consideration of the application.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Anthony P. Curtis', is written over a horizontal line.

Anthony P. Curtis, Ph.D.
Registration No. 46,193
Agent for Applicant

BRINKS HOFER GILSON & LIONE
P.O. BOX 10395
CHICAGO, ILLINOIS 60610
(312) 321-4200